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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
BURGESS, BARBARA N	

ART UNIT	PAPER NUMBER
2157	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/417,527	POTZOLU, DAVID M.	
	Examiner	Art Unit	
	Barbara N. Burgess	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 August 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9 and 11-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9 and 11-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *14*.
4) ☒ Interview Summary (PTO-413) Paper No(s). *20050708*.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

This Office Action is in response to Appeal Brief filed August 2, 2004. The finality of the previous rejections is hereby withdrawn due to a deficiency. Claim 20 was rejected in the previous Office Action but not included in the rejection heading. Examiner takes this opportunity to correct this typographical error and make the record clear that Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (6,282,563 B1) in view of Li et al. (6,119,165).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 4-5, 7, 9, 13, 15, 17, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (hereinafter "Yama", 6,282,563 B1) in view of Li et al. (hereinafter "Li", 6,119,165).

As per claims 1 and 21, Yama discloses a method and set of instructions residing in a storage medium, said set of instructions capable of being executed by a processor to implement a method for providing functionality on a network, the network comprising the nodes, the method comprising:

- Moving an agent from a first device to a target device (column 1, lines 16-21, column 3, lines 15-17, column 4, lines 15-25, column 5, lines 20-23; The agent is moved from the first computer, which is a source, to the second computer, which is a destination computer);
- Re-routing relevant traffic to the target device (column 3, lines 2-7, 15-17, 51-56, column 4, lines 7-13, 42-57, column 5, lines 1-5, 25-28, 43-55, column 6, lines 1-4, 8-10, 17-22, 26-28, column 8, lines 15-21, 49-53, 58-59, column 12, lines 27-41; The status of the second computer, which is the destination computer, is determined. Based upon the determination, the message is rerouted from the first computer, which is a source, to the second computer);

Yama does not explicitly disclose:

- Performing application layer gateway functionality by the agent at the target device.

However, the use and advantages for an agent performing application layer gateway functionality is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Li (column 1, lines 35-39, Abstract).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate an agent performing application layer gateway functionality in Yama's method in order to filter out material received at the client that may be in violation of security policy (Li, column 2, lines 20-32).

As per claim 4, Yama discloses a method of claim 1.

Yama does not explicitly disclose where the agent acts as a firewall. However, the use and advantages for an agent acting as a firewall is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Li (column 1, lines 30-33, column 2, lines 20-23).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate an agent acting as a firewall in order to filter out material received at the client that may be in violation of security policy.

As per claims 5 and 22, Yama discloses a method and set of instructions residing in a storage medium of claims 1 and 21.

Yama does not explicitly disclose where, to act as the application layer gateway, the agent:

- Accepts traffic (data stream) sent to the target device addressed to a client device;
- Performing at least one of filtering (function) the traffic (data stream) or modifying (function) the traffic (data stream);
- Sends the traffic (data stream) to the client device.

However, the use and advantages for the agent filtering the traffic before sending to the client is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Li.

Li discloses an agent monitoring and filtering the network for users attempting to view prohibited material from a website or violating security policies. If such actions

occur, the agent may terminate the session or filter out specific traffic before sending to the client (column 2, lines 20-32, column 5, lines 39-41, 49-56). Therefore, Li implicitly discloses the agent accepting traffic sent to the target device addressed to a client device, performing at least one of filtering the traffic or modifying the traffic, and sending the traffic to the client device.

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate an agent filtering the traffic before sending to the client in Yama's method to ensure that prohibited materials are not being passed to the client and increase security so that only specified users have access to certain information.

As per claim 7, Yama discloses the method of claim 1.

Yama does not explicitly disclose the agent, before performing application layer gateway functionality, installing a software module to aid in performing such functionality. However, the use and advantages for installing a software module is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Li (column 1, lines 33-35, 44-45, 48-50, 61-63, 65-67).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate installing a software module in Yama's method in order to perform functions on the client and communicate with the agent bi-directional with information being transferred both ways.

As per claim 9, Yama discloses a network comprising:

- A plurality of nodes (column 5, lines 25-27, column 6, lines 40-45)
- A plurality of links connecting the nodes (column 6, lines 36-38, 42-43)
- A route device residing on one node of the network, the route device configured to divert to the mobile agent traffic relevant to the mobile agent (column 3, lines 2-7, 15-17, column 4, lines 7-13, 42-57).

Yama does not explicitly disclose:

- A mobile agent residing on a node of the network, where the mobile agent is able to function as an application layer gateway.

However, the use and advantages for an agent performing application layer gateway functionality is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Li (column 1, lines 35-39, Abstract).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate an agent performing application layer gateway functionality in Yama's method in order to filter out material received at the client that may be in violation of security policy (Li, column 2, lines 20-32).

As per claim 13, Yama discloses the network of claim 9.

Yama does not explicitly disclose where the mobile agent functions as a firewall.

However, the use and advantages for an agent acting as a firewall is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Li (column 1, lines 30-33, column 2, lines 20-23).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate an agent acting as a firewall in order to filter out material received at the client that may be in violation of security policy.

As per claim 15, Yama discloses the network of claim 9.
Yama does not explicitly disclose a software module installed on the node on which the agent is installed, the software module aiding in performing application layer gateway functionality. However, the use and advantages for installing a software module is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Li (column 1, lines 33-35, 44-45, 48-50, 61-63, 65-67).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate installing a software module in Yama's method in order to perform functions on the client and communicate with the agent bi-directional with information being transferred both ways.

As per claim 17, Yama discloses a method of providing a functionality on a network, the network comprising nodes, the method comprising:

- Moving an agent from a first device to a target device (column 1, lines 16-21, column 3, lines 15-17, column 4, lines 15-25, column 5, lines 20-23);
- Re-routing a relevant data stream from a source to the target device (column 3, lines 2-7, 15-17, 51-56, column 4, lines 7-13, 42-57, column 5, lines 1-5, 25-28, 43-55,

column 6, lines 1-4, 8-10, 17-22, 26-28, column 8, lines 15-21, 49-53, 58-59, column 12, lines 27-41);

- At the target device, the agent accepting the data stream from the source (column 3, lines 51-56, column 4, lines 55-57, column 6, lines 25-29).

Yama does not explicitly disclose:

Performing a function on the data stream and passing the data stream to one of a set of client devices. However, the use and advantages for the agent performing a function on the data stream and passing the data stream to the clients is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Li (column 2, lines 20-32, column 5, lines 39-41, 49-56).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate an agent filtering the traffic before sending to the client in Yama's method to ensure that prohibited materials are not being passed to the client and increase security so that only specified users have access to certain information.

As per claim 20, Yama discloses the method of claim 17.

Yama does not explicitly disclose where the agent acts as a firewall. However, the use and advantages for an agent acting as a firewall is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Li (column 1, lines 30-33, column 2, lines 20-23).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate an agent acting as a firewall in order to filter out material received at the client that may be in violation of security policy.

3. Claims 2, 11, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (hereinafter "Yama", 6,282,563 B1) in view of Li et al. (hereinafter "Li", 6,119,165) and in further view of Bhide et al. (hereinafter "Bhide", 5,852,717).

As per claims 2, 11, and 18, Yama, in view of Li, does not explicitly disclose the agent acting as a web cache. However, the use and advantages for an agent acting as a web cache is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Bhide (column 2, lines 2-7, Abstract).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate an agent acting as a web cache in Yama's method in order to reduce latency by saving round-trip times between computer network components and increase the performance of client/server communication by responding more quickly to requests.

4. Claims 3, 12, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (hereinafter "Yama", 6,282,563 B1) in view of Li et al. (hereinafter "Li", 6,119,165) and in further view of Jones.

As per claims 3, 12, and 19, Yama, in view of Li, does not explicitly disclose the agent acting or functioning as a media transcoder. However, the use and advantages for an agent acting as a media transcoder is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Jones (column 1, lines 18-19, column 8, lines 45-46, column 9, lines 20-23, 29-31, 42-50, 58-60).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate an agent acting as a media transcoder in Yama's method in order for messages having multimedia programs to be converted and sent to the recipient of the message.

5. Claims 6, 8, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (hereinafter "Yama", 6,282,563 B1) in view of Li et al. (hereinafter "Li", 6,119,165) and in further view of Turek et al. (hereinafter "Turek", 6,460,070).

As per claims 6 and 14, Yama, in view of Li, does not explicitly disclose the agent automatically moving to a second target device and acting as an application layer gateway. However, in an analogous art, Turek discloses an agent deployed into the network to determine the cause and location of an event. The agent may arrive at a given node, but that node may not be the originator of the event. The agent then identifies a subset of nodes from the information received from the initial node and

proceeds to those various nodes in search for the cause and location of the event (column 2, lines 47-50, 55-62, column 5, lines 46-53, 57-59).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate the agent automatically moving to a second target device and acting as an application layer gateway in Yama's method in order to enhance the efficiency of the network by correcting the fault or event at the originating node.

As per claim 8, Yama, in view of Li, does not explicitly disclose the agent automatically uninstalling itself. However, in an analogous art, Turek discloses an agent deployed (installed) to a node and receiving information about an event, but moving (uninstalling) from that node, because the node did not originate an event, to another node that may be the originator (column 2, lines 47-50, 55-62, column 5, lines 46-53, 57-59).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate the agent automatically uninstalling itself in Yama's method because this would enable the agent to automatically diagnose and correct network problems without the need for a system administrator to manually correct the fault.

As per claim 16, Yama, in view of Li, does not explicitly disclose the agent automatically uninstalling itself. However, in an analogous art, Turek discloses an agent

deployed (installed) to a node and receiving information about an event, but moving (uninstalling) from that node, because the node did not originate an event, to another node that may be the originator (column 2, lines 47-50, 55-62, column 5, lines 46-53, 57-59).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate the agent automatically uninstalling itself in Yama's method because this would enable the agent to automatically diagnose and correct network problems without the need for a system administrator to manually correct the fault.

Response to Arguments

The Office notes the following arguments:

(a) The cited passages of Yama do not describe the claimed features. Instead, the passages relate to nothing beyond communications between two agents. This is not re-routing of relevant traffic to a target device where an agent has been moved, as required by the independent claims.

6. Applicant's arguments filed have been fully considered but they are not persuasive.

In response to:

(a) Yama **clearly** discloses an agent moving from a source to computer to a second computer (destination computer). Also, messages for the agent are transmitted to the

agent according to the location of the agent at the second computer (destination computer). Yama also references the message being held in a storage area until the agent reaches the second computer (destination computer) and then the message is routed to the agent at the second computer (destination computer) (column 3, lines 15-28, 38-55, column 4, lines 42-57). Therefore, it is **evident** that Yama discloses re-routing relevant traffic (messages) to a target device (second computer or destination computer) where an agent has been moved.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 6,282,582

US Patent No. 5,825,759

US Patent No. 6,473,761

US Patent No. 6,466,963

US Patent No. 5,903,732

US Patent No. 6,496,871

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara N Burgess whose telephone number is (703) 305-3366. The examiner can normally be reached on M-F (8:00am-4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (703) 308-7562. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Barbara N Burgess
Examiner
Art Unit 2157

July 8, 2005

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